

CLAIMS

1 1. A method for monitoring electronic communications,
2 comprising:

3 receiving a message containing one or more words
4 provided by a user during an electronic communication;
5 accessing at least a portion of said message;
6 generating user profile data, said user profile data to
7 identify said user, said user profile data corresponding to
8 at least one previous message provided by the user;
9 generating a result indicative of the likelihood that
10 said message relates to a predetermined subject;
11 updating the user profile data with said result.

1 2. The method of claim 1, wherein said message is
2 provided by the user to a software application, and said
3 portion of said message is accessed using a software module.

4 3. The method of claim 2, further comprising sending
5 said updated user profile data to the software application.

1 4. The method of claim 1, wherein receiving the
2 message containing one or more words provided by the user

1 comprises receiving a text message which has been entered
2 into a computer by said user.

1 5. The method of claim 1, wherein receiving the
2 message containing one or more words provided by the user
3 comprises receiving the message where said message has been
4 posted to an electronic bulletin board, said electronic
5 bulletin board capable of being accessed over a network by
6 one or more users.

1 6. The method of claim 2, wherein receiving the
2 message containing one or more words provided by the user
3 comprises receiving the message provided by the user to the
4 software application, where the software application is one
5 of the following: an e-mail application, an online chat
6 server application, an electronic bulletin board
7 application, a network browser application, and a parental
8 monitoring system application.

1 7. The method of claim 2, wherein accessing at least
2 a portion of the message using the software module comprises
3 transmitting a segment of the message to the software module
4 over a network, said segment having a predetermined length.

1 8. The method of claim 7, wherein accessing at least
2 a portion of the message using the software module comprises
3 transmitting the segment of the message to the software
4 module over a network, said segment being determined by an
5 add-on module associated with the software application
6 according to said predetermined length.

1 9. The method of claim 2, wherein generating user
2 profile data comprises sending said user profile to said
3 software module, sending information relating to the user's
4 identity and sending a user level, said user level
5 corresponding to a likelihood that the user has provided
6 communications relating to the predetermined subject.

1 10. The method of claim 2, further comprising:
2 assigning a user level to said user, said user level to
3 be a function of one or more previous messages the user has
4 provided to the software application, said user level to
5 vary as the likelihood that said previous messages relate to
6 the predetermined subject;

7 assigning word values to each of the one or more words
8 contained in the message, said word values to be a function
9 of the likelihood that the one or more words to which said
10 word values are assigned relate to the predetermined
11 subject;

12 assigning word levels to each of the one or more words
13 contained in the message, said word levels to be a function
14 of the likelihood that the one or more words to which said
15 word levels are assigned relate to the predetermined
16 subject;

17 assigning repeated indices to each of the one or more
18 words contained in the message; and

19 determining a set of counted words, said set of counted
20 words corresponding to the word levels and repeated indices
21 for the one or more words in said message, said set of
22 counted words to further correspond to said user level.

1 11. The method of claim 2, wherein generating the
2 result indicative of the likelihood that said message
3 relates to the predetermined subject comprises having the
4 software module generating a result indicative of the
5 likelihood that said message relates to the predetermined
6 subject, said software module to further update the user
7 profile data using said result, said software module to send
8 the updated user profile data to the software application,
9 said software application to alter the user's ability to
10 continue to provide messages as a function of the updated
11 user profile data.

1 12. The method of claim 1, wherein receiving the
2 message containing one or more words provided by the user
3 comprises receiving an analog message provided by the user
4 and converted said analog message to a digital message.

1 13. The method of claim 2, wherein accessing a portion
2 of said message using a software module comprises accessing
3 a portion of said message using a software module, said

4 software module to be remote from the software module, said
5 software application to be in communication with said
6 software module over a network.

1 14. The method of claim 2, accessing a portion of said
2 message using a software module comprises accessing a
3 portion of said message using a software module, said
4 software module to be remote from the software module, said
5 software application to be in communication with said
6 software module over a network, said user to be remote from
7 said software application, said user to provide said message
8 to said software application over said network.

1 15. The method of claim 1, further comprising
2 displaying a user level indicator to a system monitor, said
3 user level indicator to be a function of the updated user
4 profile level, said system monitor to be monitoring one or
5 more users concurrently.

1 16. The method of claim 15, wherein displaying the
2 user level indicator to the system monitor comprises
3 illuminating a series of colored lights, said colored lights
4 to be visible to the system monitor, said colored lights to
5 be illuminated as a function of user level.

1 17. The method of claim 15, wherein displaying the
2 user level indicator to the system monitor comprises
3 displaying the user level indicator to the system monitor,
4 said system monitor to be monitoring one or more users and
5 receiving user level indicators for said one or more users,
6 said one or more users to provide one or more messages, said
7 user level indicators for said one or more users to be
8 displayed contemporaneously with the receiving of said one
9 or more messages.

1 18. The method of claim 15, further comprising
2 reducing the ability of the user to continue to provide
3 messages where the user level indicator exceeds a reference
4 user level.

1 19. A method of analyzing a digital communication,
2 comprising:
3 assigning a word value to each of a plurality of words;
4 identifying a predetermined portion of said digital
5 communication, said predetermined portion to contain one or
6 more words;
7 identifying a subset of the one or more words in said
8 predetermined portion; and
9 determining a message value for said predetermined
10 portion, said message value corresponding to the word values
11 of said selected subset, said message value to be indicative
12 of the likelihood that said message relates to a
13 predetermined subject.

1 20. The method of claim 19, further comprising:
2 assigning a user level to a user, said user to provide
3 said digital communication, said user level to be
4 proportional to the likelihood that said user has provided
5 one or more digital communications relating to the
6 predetermined subject;
7 comparing said message value with a reference value;

8 and,
9 altering said user level corresponding to the
10 relationship between said message level and said reference
11 value.

1 21. The method of claim 20, further comprising:
2 adjusting a visual indicator in proportion to the user
3 level, said visual indicator to be visible to a system
4 monitor, said visual indicator to be representative of the
5 likelihood that the user has provided communications
6 relating to the predetermined subject.

1 22. The method of claim 19, further comprising:
2 assigning a user level to a user, said user level to be
3 a function of the message value of at least one digital
4 communication provided by the user;
5 assigning a word level to each of the plurality of
6 words, said word level corresponding to the likelihood that
7 the word to which the word level has been assigned relates
8 to the predetermined subject; and

1 assigning repeated indices to each of the plurality of
2 words, said plurality of words to include a first word.

1 23. The method of claim 22, wherein identifying the
2 subset of the one or more words in said predetermined
3 portion comprises limiting said subset of words in said
4 predetermined portion to the relationship of the word levels
5 for said one or more words to said user level.

1 24. The method of claim 22, wherein identifying the
2 subset of the one or more words in said predetermined
3 portion comprises identifying the subset of words in said
4 predetermined portion which have word levels not greater
5 than the user level.

1 25. The method of claim 22, further comprising
2 limiting the subset of the one or more words in said
3 predetermined portion based on the repeated indices of said
4 one or more words, where said repeated indices correspond to

5 the number of times that words having repeated indices not
6 greater than each other are to appear in said subset.

1 26. The method of claim 22, further comprising
2 limiting the subset of the one or more words in said
3 predetermined portion based on the repeated index of a first
4 word, said repeated index for said first word represents a
5 threshold number of times that words having repeated indices
6 not greater than said repeated index for said first word
7 appear in said subset.

1 27. The method of claim 22, wherein said word levels,
2 repeated indices and word values are stored in an electronic
3 database.

1 28. The method of claim 19, where selecting the
2 predetermined portion of said digital communication
3 comprises selecting a sentence contained within said digital
4 communication.

1 29. The method of claim 19, where selecting the
2 predetermined portion of said digital communication
3 comprises selecting a group of words, said group to contain
4 between 5 and 15 words.

1 30. The method of claim 19, further comprising:
2 assigning a user level to a user, said user level to be
3 a function of the message value of at least one digital
4 communication provided by the user;
5 determining a reference level, said reference level to
6 represent a predetermined threshold for said user level;
7 determining a level interval, said level interval to
8 represent a number of increments within each user level;
9 determining a user detail level, said user detail level
10 to represent the level interval which the user has obtained;
11 and
12 comparing the message value and user level to the
13 reference value.

1 31. The method of claim 30, wherein comparing the
2 message value and user level to the reference value

3 comprises determining if both the message value and the user
4 level are greater than the reference value and, if so, not
5 adjusting the user level and the user detail level.

1 32. The method of claim 30, wherein comparing the
2 message value and user level to the reference value
3 comprises determining if both the message value and the user
4 level are greater than the reference value and, if not,
5 determining if the message value is greater than the
6 reference value and not less than the user level incremented
7 by one.

1 33. The method of claim 32, wherein determining if the
2 message value is greater than the reference value and not
3 less than user level incremented by one comprises
4 determining if the message value is greater than the
5 reference value and not less than the user level incremented
6 by one and, if so, increasing the user level to a value
7 correlated to the message value.

1 34. The method of claim 32, further comprising
2 determining, where the message value is not greater than the
3 reference value and less than the user level incremented by
4 one, whether the message value is greater than the reference
5 value and the user level is not less than the reference
6 value and, if so, incrementing the user detail level, and,
7 if not, decrementing the user detail level.

1 35. An apparatus for monitoring communications,
2 comprising:
3 a memory including at least one instruction; and
4 a processor coupled to the memory, the processor, in
5 response to the at least one instruction, to,
6 receive a message containing one or more words provided
7 by a user during an electronic communication,
8 transmit at least a portion of said message, and
9 generating user profile data, said user profile data to
10 be used to identify said user, said user profile data
11 corresponding to at least one previous message provided by
12 the user.

1 36. The apparatus of claim 35, wherein said message is
2 provided by said user to a software application, said at
3 least a portion of said message is transmitted to a software
4 module, and said user profile data is provided to said
5 software module.
6

1 37. The apparatus of claim 36, wherein said software
2 module includes software program code to,
3 generate a result indicative of the likelihood that
4 said message relates to a predetermined subject,
5 update said user profile data using said result, and
6 send said updated user profile data to the software
7 application.

1 38. The apparatus of claim 35, wherein the software
2 application is executed by said processor.

1 39. The apparatus of claim 35, wherein the user
2 provides said message to an electronic bulletin board, said

3 electronic bulletin board capable of being accessed over a
4 network by one or more users.

1 40. The apparatus of claim 36, wherein the software
2 application is one of the following: an e-mail application,
3 an online chat server application, an electronic bulletin
4 board application, a network browser application, and a
5 parental monitoring system application.

1 41. The apparatus of claim 36, wherein the processor
2 further includes at least one instruction to transmit a
3 segment of the message to the software module over a
4 network, said segment having a predetermined length.

1 42. The apparatus of claim 41, wherein said segment is
2 determined by an add-on module associated with the software
3 application according to said predetermined length.

1 43. The apparatus of claim 35, wherein the user
2 profile data includes information relating to the user's
3 identity and a user level, said user level to be a function
4 of the likelihood that the user has provided communications
5 relating to the predetermined subject.

1 44. The apparatus of claim 36, wherein the processor
2 further includes at least one instruction to,
3 assign a user level to said user, said user level to be
4 a function of one or more previous messages the user has
5 provided to the software application, said user level to
6 vary as the likelihood that said previous messages relate to
7 the predetermined subject;

8 assign word values to each of the one or more words
9 contained in the message, said word values to be a function
10 of the likelihood that the one or more words to which said
11 word values are assigned relate to the predetermined
12 subject;

13 assign word levels to each of the one or more words
14 contained in the message, said word levels to be a function
15 of the likelihood that the one or more words to which said
16 word levels are assigned relate to the predetermined

17 subject;
18 assign repeated indices to each of the one or more
19 words contained in the message; and
20 determine a set of counted words, said set of counted
21 words to be a function of the word levels and repeated
22 indices for the one or more words in said message, said set
23 of counted words to further be a function of said user
24 level.

45. The apparatus of claim 36, wherein said result is
used to update the user profile data before it is sent to
the software application.

46. The apparatus of claim 35, where the message
provided by the user is an analog message which is converted
into a digital message.

47. The apparatus of claim 36, where said software
module is remote from said software application, said

3 software module to be in communication with said software
4 application.

1

2

3 48. The apparatus of claim 36, where said software
4 application is in communication with said software module
5 over a network, said user to be remote from said software
6 application, said user to provide said message to said
7 software application over said network.

1 49. The apparatus of claim 35, further comprising:

2 a user level indicator, said user level indicator to be
3 a function of the updated user profile data, said user level
4 indicator to be visible to a system monitor, said system
5 monitor to monitor one or more users concurrently.

1 50. The apparatus of claim 49, wherein said user level
2 indicator comprises a series of colored lights, said series
3 of colored lights to be illuminated as a function of the
4 user level.

1 51. The apparatus of claim 49, wherein the system
2 monitor is to monitor one or more users and receive user
3 level indicators for said one or more users, said one or
4 more users to provide one or more messages, said user level
5 indicator for said one or more users to be displayed
6 contemporaneously with the receiving of said one or more
7 messages.

1 52. The apparatus of claim 49, wherein the ability of
2 the user to continue to provide messages to said software
3 application is reduced in response to the user level
4 exceeding a reference user level.

1 53. An apparatus to analyze a digital communication,
2 comprising:
3 a memory including at least one instruction; and
4 a processor coupled to said memory, the processor, in
5 response to the at least one instruction, to,
6 assign a word value to each of a plurality of words,
7 select a predetermined portion of said digital

8 communication, said predetermined portion to contain one or
9 more words,
10 identify a subset of the one or more words in said
11 predetermined portion, and
12 determine a message value for said predetermined
13 portion, said message value corresponding to the word values
14 of said subset of the one or more words, said message value
15 to be indicative of the likelihood that said message relates
16 to a predetermined subject.

1 54. The apparatus of claim 53, wherein said processor
2 further includes at least one instruction to,
3 assign a user level to a user, said user to provide
4 said digital communication, said user level to be
5 proportional to the likelihood that said user has provided
6 one or more digital communications relating to the
7 predetermined subject,
8 compare said message value with a reference value, and,
9 alter said user level as a function of the relationship
10 between said message level and said reference value.

1 55. The apparatus of claim 54, wherein said processor
2 further includes at least one instruction to,
3 adjust a visual indicator in proportion to the user
4 level, said visual indicator to be visible to a system
5 monitor, said visual indicator to be representative of the
6 likelihood that the user has provided communications
7 relating to the predetermined subject.

1 56. The apparatus of claim 54, wherein said processor
2 further includes at least one instruction to,
3 assign a user level to a user, said user level to be a
4 function of the message value of at least one digital
5 communication provided by the user,
6 assign a word level to each of the plurality of words,
7 said word level to be a function of the likelihood that the
8 word to which the word level has been assigned relates to
9 the predetermined subject, and
10 assign repeated indices to each of the plurality of
11 words, said plurality of words to include a first word.

1 57. The apparatus of claim 56, wherein said processor
2 further includes at least one instruction to,
3 limit said subset of words in said predetermined
4 portion as a function of the relationship of the word levels
5 for said one or more words to said user level.

1 58. The apparatus of claim 56, wherein said subset has
2 word levels no greater than the user level.

1 59. The apparatus of claim 56, wherein said processor
2 further includes at least one instruction to,
3 limit said subset of words in said predetermined
4 portion based on the repeated indices of said one or more
5 words, where said repeated indices are a function of the
6 number of times that words having repeated indices not
7 greater than each other are to appear in said subset.

1 60. The apparatus of claim 56, wherein said processor
2 further includes at least one instruction to,
3 limit the subset of the one or more words in said

4 predetermined portion based on the repeated index of a first
5 word, said repeated index for said first word represents a
6 threshold number of times that words having repeated indices
7 not greater than said repeated index for said first word
8 appear in said subset.

1 61. The apparatus of claim 56, wherein said word
2 levels, repeated indices and word value are stored in an
3 electronic database.

1 62. The apparatus of claim 53, wherein said
2 predetermined portion of said digital communication is a
3 sentence contained in said digital communication.

1 63. The apparatus of claim 53, wherein said
2 predetermined portion of said digital communication is a
3 group of words, said group to contain between 5 and 15
4 words.

1 64. The apparatus of claim 53, wherein said processor
2 further includes at least one instruction to,
3 assign a user level to a user, said user level to be a
4 function of the message value of at least one digital
5 communication provided by the user,
6 determine a reference level, said reference level to
7 represent a predetermined threshold for said user level,
8 determine a level interval, said level interval to
9 represent a number of increments within each user level,
10 determine a user detail level, said user detail level
11 to represent the level interval which the user has obtained,
12 and
13 compare the message value and user level to the
14 reference value.

1 65. The apparatus of claim 64, wherein said processor
2 further includes at least one instruction to,
3 determine if the message value and the user level are
4 both less than the reference value, and, if not, determining
5 if the message value is greater than the reference value and
6 not less than the user level incremented by one,
7 setting, where the message value is greater than the

8 reference value and not less than the user level incremented
9 by one, the user level to a value correlated to the message
10 value,

11 determining, where the message value is not greater
12 than the reference value and less than the user level
13 incremented by one, whether the message value is greater
14 than the reference value and the user level is not less than
15 the reference value and, if so, incrementing the user detail
16 level and, if not, decrementing the user detail level.

66. A computer program product, comprising:

a computer usable medium having computer readable code
embodied therein to monitor electronic communications, the
computer readable program code in said computer program
product comprising:

first computer readable program code to receive an
electronic communication containing one or more words
provided by a user;

second computer readable program code to access at
least a portion of said electronic communication;

third computer readable program code to generate user
profile data, said user profile data to be used to identify
the user, said user profile data to correspond to at least

14 one previous electronic communication provided by the user;
15 fourth computer readable program code to generate a
16 result indicative of the likelihood that said electronic
17 communication relates to a predetermined subject; and
18 fifth computer readable program code to update the user
19 profile data with said result.

1 67. A computer program product of claim 66, wherein
2 said first computer readable program code to receive an
3 electronic communication containing one or more words
4 comprises first computer readable program code to receive a
5 text message which has been entered into a computer by said
6 user.

1 68. A computer program product of claim 67, wherein
2 said first computer readable program code to receive the
3 electronic communication containing one or more words
4 comprises first computer readable program code to receive
5 the electronic communication where said electronic
6 communication has been posted to an electronic bulletin

7 board, said electronic bulletin board capable of being
8 accessed over a network by one or more users.

1 69. A computer program product of claim 66, wherein
2 said first computer readable program code to receive the
3 electronic communication containing one or more words
4 comprises first computer readable program code to receive
5 the electronic communication containing one or more words
6 provided by the user to a software application, where the
7 software application is one of the following: an e-mail
8 application, an online chat server application, an
9 electronic bulletin board application, a network browser
10 application, and a parental monitoring system application.

1 70. A computer program product of claim 66, wherein
2 said second computer readable program code to access at
3 least a portion of said electronic communication comprises
4 second computer readable program code to transmit a segment
5 of the electronic communication to a software module over a
6 network, said segment having a predetermined length.

1 71. A computer program product of claim 70, wherein
2 said second computer readable program code transmits the
3 segment of the electronic communication to a software module
4 over a network, said segment being determined by an add-on
5 module associated with the software application according to
6 said predetermined length.

1 72. A computer program product of claim 66, wherein
2 said second computer readable program code to generate user
3 profile data comprises computer readable program code to
4 send information relating to the user's identity to a
5 software module, computer readable program code to send a
6 user level to a software module, said user level to be
7 correspond to the likelihood that the user has provided
8 electronic communications relating to the predetermined
9 subject.

1 73. A computer program product of claim 66, further
2 comprising:
3 sixth computer readable program code to assign a user

4 level to said user, said user level to be correspond to one
5 or more previous electronic communications the user has
6 provided to a software application, said user level to vary
7 as the likelihood that said previous electronic
8 communications relate to the predetermined subject;

9 seventh computer readable program code to assign word
10 values to each of the one or more words contained in the
11 electronic communication, said word values to be a function
12 of the likelihood that the one or more words to which said
13 word values are assigned relate to the predetermined
14 subject;

15 eighth computer readable program code to assign word
16 levels to each of the one or more words contained in the
17 electronic communication, said word levels to be a function
18 of the likelihood that the one or more words to which said
19 word levels are assigned relate to the predetermined
20 subject;

21 ninth computer readable program code to assign repeated
22 indices to each of the one or more words contained in the
23 electronic communication; and

24 tenth computer readable program code to determine a
25 subset of words, said subset to be based on the word levels
26 and repeated indices for the one or more words in said

27 electronic communication, said subset to further be based on
28 said user level.

1 74. A computer program product of claim 66, wherein
2 said third computer readable program code to generate the
3 result indicative of the likelihood that said message
4 relates to the predetermined subject comprises computer
5 readable program code to generate the result indicative of
6 the likelihood that said message relates to the
7 predetermined subject, said result to be used to update said
8 user profile data, said updated user profile data to be sent
9 to a software application, said software application to
10 alter the user's ability to continue to provide electronic
11 communications based on the updated user profile data.

1 75. A computer program product of claim 74, further
2 comprising:
3 sixth computer readable program code to display a user
4 level indicator to a system monitor, said user level
5 indicator to correspond to the updated user profile level,

6 said system monitor to be monitoring one or more users
7 concurrently.

1 76. A computer program product of claim 75, wherein
2 said sixth computer readable program code to display the
3 user level indicator to the system monitor comprises
4 computer program readable code to display the user level
5 indicator to the system monitor, said system monitor to be
6 monitoring one or more users and receiving user level
7 indicators for said one or more users, said one or more
8 users to provide one or more messages, said user level
9 indicators for said one or more users to be displayed
10 contemporaneously with the receiving of said one or more
11 messages.